

**Preliminary Structural Project Report
For
Bridge Rehabilitation Project**

**Structure C-616; 5 miles Southwest of Bluff at Sand Island
(SR-191 M.P. 20.55)**



Project Manager: Kim Manwill
Project Number: BHF-0191(46)20
PIN number: 4792
CID number: 5138001D
Fiscal Year: 2007

UDOT

Structures Division
Region 4

Prepared by
Nathan Peterson
October 2004

Reviewed by Structures team: October 18, 2004
Reviewed by Structures team: September 25, 2006

REPORT SUMMARY

Scope of Project:

1. Purpose of Report

This report presents an overview of a project to rehabilitate C-616. The type of preventive maintenance is to place a polymer overlay on the bridge deck. During this time the problem with the approach slabs, joints, bearing units, and scour will be addressed. The bridge is located in Region 4 on SR-191 five miles southeast of Bluff. It is intended to convey the need, scope, schedule, budget, and quality control process for the project.

2. Project Information

Region: 4 **Route No.:** SR-191 **Date:** May, 2003

Project Name: Bridge Rehabilitation C-616; 5 miles southwest of Bluff

Beg. R.P.: 20.55 **End R.P.:** 20.55

Project Number: BHF-0191(46)20 **PIN:** 4792 **CID:** 5138001D

Project Design: Bridge: UDOT Structures Division;
Roadway: Region 4 Preconstruction

Project Mgr:

3. Plan:

This project is intended to provide “*scour repairs*” to extend the bridge life and to rehabilitate the scour deficiency only.

4. Work items to be completed:

The scope of this project is to address the drainage and scour issues in this concept.

- Revetment at abutment 1 and pier 3 with ajax modules for scour (see Denis Stuhff for details on scour repair).

5. Work items to be deferred:

Roadway and safety items beyond what is related to the bridge repairs will not be included.

6. Design Exceptions:

Design Exception is not expected.

7. Maintenance Considerations:

Region 4 Maintenance Station 4421 should be included in the concept development.

8. Construction Considerations:

Consideration to the river channel including seasonal flows, and environmental impacts and permits should be considered in project costs and schedules. Limitations of Operations, and other specifications should be considered. This bridge is on Indian lands. Design, and work needs to be coordinated with the Navajo Nation.

9. Risk Analysis: (None anticipated at this time)

10. Development Process:

New or Major Reconstruction	_____
Rehabilitation	_____x_____
Preservation	_____

Schedule of Project:

To get the best quality and bid prices, it is expected that this project be advertised no later than October 31, 2003. Design should take no longer than two weeks. Construction should be completed in less than three weeks. A tentative schedule is:

1.	Begin Design Phase	October 2006
2.	Advertisement Date	March 2007
3.	Begin of Construction	Spring 2007
4.	Completion of Construction	Summer 2007

Budget of Project:

1. **Funding Source:** **\$ 1,000,000 BR Funds**
2. **Cost Estimate:** **\$ 997,500**

The approximate scope of this project is erosion control, slope and scour repair.

0C-616, Bluff Structure				
Item	Quantity	Unit	Unit Cost	Total Cost
Scour Repair	1	LUMP		
Erosion Control/ Slope	1	LUMP		
Environmental Clearances	1	LUMP		
Tribal Clearances	1	LUMP		
Bridge Subtotal				\$ 575,000.00
Mobilization	1	LUMP		
Traffic Control	1	LUMP		
MOT	1	LUMP		
15% PE				
15% CE				
20 %Contingency				
Project Total				\$ 997,500.00

Location Map



C- 616